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REPORT**

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BCG

THE BOSTON CONSULTING GROUP

**FINDINGS FROM THE 2012 SUSTAINABILITY & INNOVATION
GLOBAL EXECUTIVE STUDY AND RESEARCH REPORT**

The Innovation Bottom Line

How companies that see sustainability as both a necessity and an opportunity, and change their business models in response, are finding success.

By *MIT Sloan Management Review* and The Boston Consulting Group

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The Innovation Bottom Line

INTRODUCTION: Sustainability, Innovation and Profits

Since 2010, *MIT Sloan Management Review* and The Boston Consulting Group have been charting how organizations have tackled sustainability-related challenges — from resource scarcity to customer demands for healthier products — with innovations that create business value. Our 2010 study found Sustainability Embracers, who firmly believe that sustainability is necessary to be competitive. In 2011, we probed the business dimension more deeply and discovered that sustainability had become a permanent element of many company agendas and a source of profit for some.

This year, the trend toward profit continued: Key measures bumped up and showed that sustainability is paying off for a growing number of companies. Overall, the portion of respondents reporting profit from sustainability went up 23%, to 37% of the total.

But perhaps most important: Nearly 50% of companies have changed their business models as a result of sustainability opportunities — a 20% jump over last year. As we will explore in detail, business-model innovation is the crux of sustainability profits. Companies reporting that it adds to their bottom lines leverage these innovations to translate sustainability opportunities and pressures into business value.

A Clear Trajectory

Demands are coming from all sides, creating a systemic imperative and an opportunity to advance sustainability goals. As companies in many industries grapple with costs, they are turning to their supply chains to reduce energy use, simplify packaging, mitigate commodity price risks and meet customer sustainability expectations. Consumers, especially in Europe, are increasingly aware of a product's sustainability credentials and willing to pay a premium for environmentally sound products and services. Employees' expectations bring a strong internal pressure. Their growing commitment to sustainability makes the company's footprint a key element in attracting and retaining talent, especially among younger generations.

The systemic effect of these demands is elevating the sustainability agenda in a wide range of



NORTH AMERICAN COMPANIES LAG
Companies in developing countries change their business models as a result of sustainability at a far higher rate than those based in North America.

industries. Companies in resource-intensive industries have been grappling with sustainability issues for a number of years. But other industries, from consumer products to software, are also increasing their focus on sustainability. Reinsurers, for example, are adding sustainability risks to the actuarial equation, driving companies to innovate to avert those risks. The global software giant SAP has declared sustainability as its purpose, according to Peter Graf, chief sustainability officer. “We want to be the company that helps manage more than finance and human resources,” he says. “That is why we have started to also help clients optimize energy consumption and natural resource use across their supply chains, ensure the safety of products and reduce the risk of their operations.” UPS is turning to technology suppliers to help reduce emissions and costs from its transportation fleet. “Probably the biggest challenge for us is going to be how quickly manufacturers can develop the technology that we need,” says Scott Wicker, chief sustainability officer.

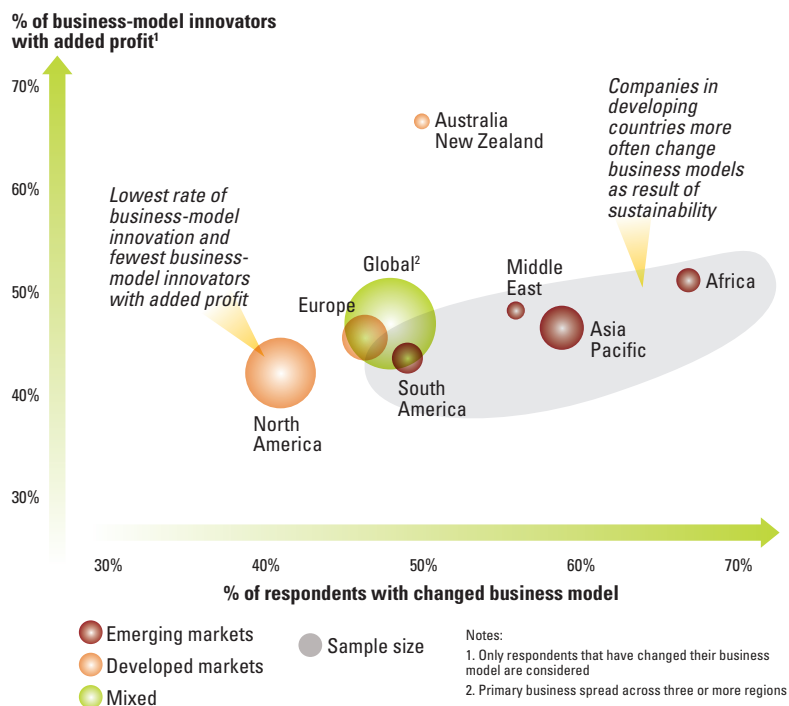
The sustainability race is a global one. According to our research, companies in developing countries are the most likely to focus on sustainability-related business-model innovation, largely,

perhaps, because these regions face significant resource scarcity and population growth challenges. Many global companies have also changed their business models in response to sustainability, pursuing growth in developing markets and leveraging those markets for manufacturing and production. North American companies lag. (See “North American companies lag,” below.) Many of sustainability’s demands have not taken hold in the region nor spurred companies to translate these pressures into profitable initiatives.

The Sustainability Bull’s-Eye

The reality of environmental and population trends is putting sustainability squarely in the sights of business. In many parts of the world, natural resources such as water are growing scarce, and energy costs are mounting across the globe. Populations are migrating, and another 2 billion people are projected to be on the planet in a few generations. Consumers are becoming more discerning about the sustainability footprint of the products and services they use. In order to thrive, businesses need to respond—and are. “Companies can find ways to solve these problems and profit in the process. But to do so takes innovation in management practices, business models and market infrastructures,” says Jason Jay, director of the MIT Sloan Initiative for Sustainable Business and Society. As Dan Bena, PepsiCo’s senior director of sustainable development, says: “These things are clearly within the bull’s-eye of sustainable development.”

Zipcar is a prime example of a company hitting the bull’s-eye, where the necessity of sustainability meets opportunity. Robin Chase, Zipcar’s former CEO, points out that 50% of the world’s population lives in cities, and expects that number to climb to 70% by 2050. As a result, urban lifestyles are changing and car ownership, especially among younger generations, is falling down the list of aspirations. Although every shared car can replace 15 to 20 owned cars and up to three parking spaces, Zipcar isn’t a car rental company with environmental objectives — sustainability is at the root of the value it provides. Avis Budget Group has taken notice of the company’s growing value. In January 2013, it announced its intention to acquire Zipcar.



A FRAMEWORK FOR ANALYZING BUSINESS MODELS

In our survey, when respondents answered questions about sustainability and their business models, we presented them with a business model framework developed by the Boston Consulting Group. This framework describes business models in terms of a value proposition and an operating model.

VALUE PROPOSITION: What are we offering to whom?	OPERATING MODEL: How do we profitably deliver the offering?
TARGET SEGMENTS: Which customers do we choose to serve? Which of their needs do we seek to address?	VALUE CHAIN: How are we configured to deliver on customer demand? What do we do in-house? What do we outsource?
PRODUCT OR SERVICE OFFERING: What are we offering customers to satisfy their needs?	COST MODEL: How do we configure our assets to deliver on our value proposition profitably?
REVENUE MODEL: How are we compensated for our offering?	ORGANIZATIONAL CHANGE: How do we deploy and develop our people to sustain and enhance our competitive advantage?

Long-established companies are also putting the sustainability bull's-eye in their sights and seeing it as a core business driver. PepsiCo, for example, defines its business as "Performance with Purpose." For the global food and beverage company, financial performance is tightly linked to achieving social and environmental goals in human, environmental and talent sustainability.¹ The pharmaceutical giant Bristol-Myers Squibb sees sustainability as fundamental to its future growth. "It is really core to our business," says Susan Voigt, vice president for environment, health, safety and sustainability. "We define sustainability for our company as helping patients prevail over serious diseases in a manner that contributes to economic growth, social responsibility and a healthy environment."

Nonetheless, hitting the bull's-eye is still fraught with challenges. Almost half (46%) of our survey respondents find it difficult to quantify the intangible effects of sustainability, and 37% say it conflicts with other priorities. Forty percent report that higher operational costs take away from profit, and 33% cite increased administrative costs connected with sustainability programs as another profit drain.

However, many companies are profiting from their sustainability efforts and changing their business models to generate that profit. We call them Sustainability-Driven Innovators. They comprise

23% of our survey respondents. In this year's report, we focus on these companies and how sustainability is adding to corporate profits.

Section I

The Hallmarks of Sustainability-Driven Innovators

Business model innovation is the bottom line of Sustainability-Driven Innovator success. In stark contrast to managers who say sustainability is not adding to profits, those who say that it is are more than twice as likely to report that sustainability is driving business-model innovation. As Michael Bremans, Chairman of Ecover, a manufacturer of eco-friendly cleaning products, puts it: "Sustainability means that you are continuously looking at innovation and improvement. You shouldn't think of it as a best or finished solution. It's a process that requires constant attention and commitment."

Business-model innovation looks beyond product, service or technology advances. This dimension of innovation explicitly addresses the fundamental choices a company makes about what it is offering to whom — its value proposition — and how it leverages its value chain, cost models and organization to deliver that value (see "A Framework for Analyzing Business Models").²



A clear business case helps ensure that innovations deliver value. Overall, the percentage of respondents who say their companies have developed sustainability business cases has grown over the years. With Sustainability-Driven Innovators, the number is pronounced: 54% have developed a business case versus 38% overall. Developing a business case avoids what Paul Murphy, chief executive of Valid Nutrition, the social enterprise food production arm of VALID Group, cites as a dangerous pitfall. “Too many companies see sustainability as an insurance policy and just tick off the boxes,” he says. “They often spend significant amounts of money that, from a strategic and business development standpoint, leads to a dead end.”

To avoid that dead end, Sustainability-Driven Innovators see the opportunity differently than do companies that haven’t gleaned sustainability’s financial rewards. They don’t dwell on it as a cost issue. They focus on how their efforts can increase market share, boost energy efficiency and build competitive advantage. Sustainability-Driven Innovators bring a strong execution focus to their efforts. These companies are much more likely to place customers at the center and work closely with many stakeholders. They also drive sustainability objectives through skillful organizational change.

In the remainder of this report, we look at these specific hallmarks in detail.

Section II

The Crux of Sustainability-Driven Profit: Business-Model Innovation

To gain a deeper understanding of sustainability innovation, we presented survey respondents with the business model framework described above, which was developed by The Boston Consulting Group. (See “A Framework for Analyzing Business Models,” page 5.) Using this framework, we asked respondents how (if at all) they have changed their business model. We found that up to 59% of respondents whose companies changed three or four business model elements report profit from sustainability efforts.

In short, Sustainability-Driven Innovators pursue innovation aggressively across their business models — much more so than companies that don’t achieve profits from sustainability efforts.

The Potent Combination

A surprising combination of business model elements delivered the most potent results. They weren’t the game-changing products and businesses that one usually hears in the context of innovation. Sustainability-Driven Innovators often take a more straightforward route, combining target segments with value-chain innovations. Nearly 60% of organizations that pull these two levers and change one or two other business model elements are more likely to be Sustainability-Driven Innovators. (See “The Extent of Business Model Change,” page 7.) Pulling both allows companies to target new segments and/or better serve the segments where they currently compete. Value-chain innovations help companies realize innovations in these segments.

Kraft Foods is a perfect example. (In October 2012, Kraft Foods changed its name to Mondelez International.) Sustainable sourcing in its value chain is a key part of the company’s strategy, according to Chris McGrath, then vice president for sustainability. In addition to protecting the environment and helping farmworkers improve their livelihoods, models such as Rainforest Alliance, Fair Trade and UTZ Certified help boost crop yields and capacity — a critical need for a global food company dependent on reliable access to commodities. Last year alone, Kraft increased its sustainable sourcing of agricultural commodities by 36%. Currently, more than 15 of its brands carry the Fair Trade or Rainforest Alliance marks.

But value chain innovations do more for Kraft than help ensure reliable sources of commodities: they have opened up new consumer segments. Coffee is one of Kraft’s biggest success stories. This year, Kraft committed to 100% sustainable sourcing of the raw materials for its European coffee brands by 2015. “Our consumers and customers care about the benefits certification and verification deliver,” says McGrath. “It is good for business and brings our work full circle.” In the United Kingdom, the Rainforest Alliance Certified seal is generating double-digit

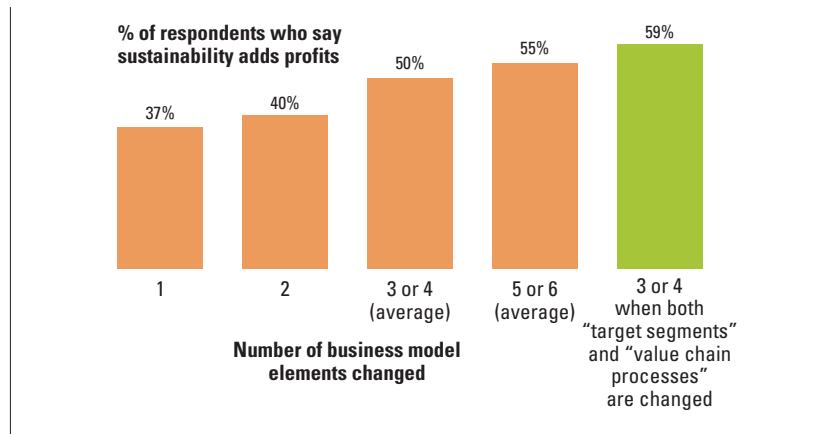
revenue growth. In Sweden, Kraft's sales of instant and espresso coffees with the seal have doubled with the "away from home" consumer segment.

More often than not, however, "greening" a product is not the key to building business in target segments. Kraft discovered this with its YES Pack commercial salad dressings. Through supply chain innovations, the company significantly reduced its packaging costs. The new plastic container requires 50% less energy to produce and uses 28% less primary packaging material than its predecessors. What opens doors to commercial segments, however, is the package design. The bigger, easier-to-use containers — which are also less expensive to produce — are extremely popular with restaurants, giving Kraft competitive advantage with lower costs.³

For Dell, packaging innovation was important to maintaining business in many of its target segments. "You might think packaging is a mundane topic," said John Pflueger, Dell's principal environmental strategist. "But it is a recurring pain point for many customers." Dell's clientele wants strong packaging to ensure their equipment will arrive undamaged, while Dell wants lighter packaging material to reduce its shipping costs. The company turned to its supply chain for an answer. It found a Chinese company that was experimenting with bamboo fibers as a substitute for paper used in cardboard packaging. Bamboo, which is native to China, is one of the fastest growing plants in the world and, as a result, a renewable resource.

The experiment ultimately proved successful. Because of its structural strength, 70% of Dell notebooks are now shipped in bamboo. The company was also careful to make sure that it was indeed using a sustainable resource; pandas, for example, eat bamboo. In collaboration with the Forest Stewardship Council, Dell ensures that the bamboo forests from which it is sourcing raw materials are not panda habitats.

To gain competitive advantage, Kimberly-Clark looks at the entire value chain of its products, cradle to grave. Its business customers are particularly keen on reducing waste in an environmentally positive way. In its professional business market, the company launched a program called "Reduce



Today, Respect Tomorrow." One of its offerings is a hand towel for public washrooms where users can dry their hands with only one towel. The product certainly has a potentially powerful "green" message. As Thomas Falk, Kimberly-Clark's CEO and chair, points out, Kimberly-Clark has reduced the amount of fiber in its professional towels by up to 17% since 2005. The company has one of the most progressive fiber procurement policies in the tissue industry. It reduced its water use by 1.1 million cubic meters between 2010 and 2011 and regularly seeks to reduce its use of transport, storage and landfill.

But Kimberly-Clark doesn't rely solely on the sustainability credentials of its products. The value to customers is the reduced cost of fewer towels. "Sustainability can create competitive advantage," says Falk. "If we can make a towel that is good enough to dry hands with only one sheet and we can sell it at a competitive price, we create value for the customer and the environment."

Doing Things Differently, Doing Different Things

Value chain and target segment innovations are by no means the exclusive source of sustainability profit and competitive advantage. Examples of successful sustainability-driven innovation fall along a rich spectrum — from doing things differently to doing entirely different things.

Incremental steps, for example, can significantly improve efficiency and reduce cost. U.K.-based supermarket retailer Sainsbury's saved \$2.4 million by improving water efficiency in its stores. The com-

THE EXTENT OF BUSINESS MODEL CHANGE
Fifty percent of our survey respondents who have changed three or four business model elements say they profit from their sustainability activities, compared to only 37% of those who changed only one element of their business model.



pany fixed leaks, installed sensors on urinals and reduced toilet water capacity. In addition, rainwater harvesting, low-flush toilets and waterless urinals are installed in all of its new stores.

Nestlé developed a cost model innovation in a novel point in its value chain. The company realized how to use coffee grounds — a by-product of its manufacturing process — to help power its factories. Instead of treating coffee grounds as waste, Nestlé discovered that burning them can generate steam, which is used in many of its factories. Some 60% of the steam the company uses now comes from burning coffee grounds, significantly reducing Nestlé's reliance on natural gas. In addition, in over 20 years, the company was able to divert 1.24 million tons of coffee grounds away from landfills.

At the other end of the spectrum, Interface, the world's largest manufacturer of modular carpet, developed a powerful revenue model innovation through a service offering with some similarities to Zipcar's. Its FLOR line offers a system of carpet squares that customers can combine and assemble to create rugs, runners or wall-to-wall designs. In 2003, it began to offer its carpet tiles as a service. Under this model, the company maintains the carpet for customers throughout its life — from installation to replacing tiles to recycling at the end of the carpet's use.

Apparel manufacturer Patagonia used its sustainability message to bolster its value-proposition innovations with a provocative brand-building campaign. In 2011, it took out a full-page ad in *The New York Times* with the surprising headline: "Don't Buy This Jacket." Consumers were asked to sign a two-part pledge online. In signing the pledge, both consumers and Patagonia agreed to reduce con-

sumption and waste by only buying items when needed, repairing items when they break and recycling products at the end of their useful life. If the company didn't have credibility in sustainability, the ad could have backfired. The company did, however, and the campaign generated significant buzz. But it also achieved its most important aim: reinforcing Patagonia as a high-quality brand that offers durable, long-lasting products.

Making Sustainability Efforts Happen

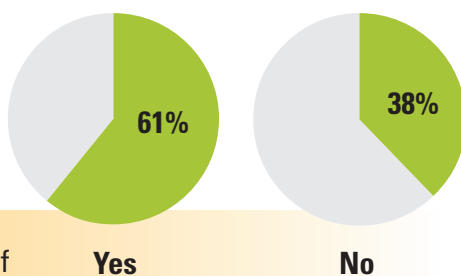
Like any major business initiative and opportunity, sustainability-driven innovation requires adroit change management skills and innovative approaches to organizational governance, leadership and employee engagement.

Our research found that top management attention is central. Sixty-one percent of companies that have changed their business model and have sustainability as a permanent fixture on their management agenda say they have added profit from sustainability. (See "Top Management Agenda," below.)

Former CEO of Campbell Soup Company Douglas Conant made sustainability a focus. He argues that a company's CEO must make sustainability a priority to keep it from falling off the radar and becoming a risk. At Campbell, he advanced what he calls an "abundance mentality" — challenging people not only to create shareholder value but to do it in a way that simultaneously helps build a better world. This abundance mentality is not unique to Campbell. Leadership can unleash it by putting sustainability opportunities front and center. Conant did so personally, making a point of frequenting company discussions on sustainability. "As I did this, sustainability became part of people's everyday conversation and thinking," he says. "It became part of the fabric of doing your job."

At telecommunications company Sprint, sustainability is a board-level agenda item. In 2012, the

Percent saying sustainability added profit



Is sustainability on the agenda of top management?

TOP MANAGEMENT AGENDA

More than 60% of companies that have changed their business model and have sustainability as a permanent fixture on their management agenda say they have added profit from sustainability.

company made its sustainability efforts part of the formal board review process. At nominating and governance committee meetings, members review the company's sustainability performance against its goals. Sustainability has become a core part of the company's annual review.

Integrating Sustainability into the Company

Sustainability-Driven Innovators don't treat sustainability as a stand-alone function detached from the business. They integrate the efforts into operations and planning. "We have sustainability in all of our operations," says Hans Johr, Nestlé's corporate head of agriculture. "We don't even have a sustainability officer. We believe that you can't make good progress by using a 'doctor' prescribing to everyone what they should do."

At Dell, sustainability is deeply integrated into the organization and the function reports to the chief marketing officer. Dell's Pflueger points out that the marketing organization has a global purview that gives sustainability an equally broad outreach. Reporting to the marketing organization also ties the efforts to customers, analysts and opportunities to leverage sustainability for brand development. To build sustainability expertise across the organization, Dell uses a hub-and-spoke model. A small core team works with subject-matter experts across the company to collect data and generate insights about what customers are seeking.

Kimberly-Clark uses a bottom-up/top-down approach and matrix structure to drive its sustainability efforts. The company's CEO meets with his leadership team and the head of sustainability to set five-year goals and a vision for efforts beyond. The planning work then cascades through the organization for vetting and input. "But then each line executive owns the goals," Falk says. "We develop a quarterly scorecard so that my leadership team and every business unit leader can see where they stand. Sustainability goals are as important as any others on their lists."

Scorecards, key performance indicators (KPIs) and other metrics are a mainstay of how many Sustainability-Driven Innovators make sure their efforts come to fruition and achieve the desired impact.

Timberland, for example, is currently developing a new set of sustainability KPIs that will be tightly linked to financial performance. AT&T invested in back-end systems to collect the data needed to evaluate its efforts. At AT&T, facilities are graded A through F and the scorecard data is shared broadly throughout the organization. "Visibility into the data drives behavior," says John Schulz, director of sustainability operations. "Managers want to do well among their peers, and progress on sustainability is linked to their annual performance reviews."

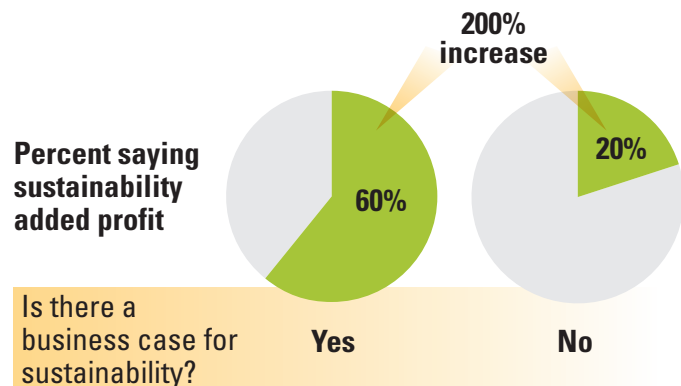
Most Sustainability-Driven Innovators don't tend to march to the beat of their own drummers. They are not married to one-size-fits-all or other prescribed approaches. Instead, they generate profit by changing the way they address their markets and operating models. Sustainability is a strategic mandate that Sustainability-Driven Innovators support through providing leadership from the top and by integrating sustainability into the organization.

Section III

The Business Case Effect

A clear business case is vital to generating profit from sustainability. It defines how a given innovation will add business value: companies that profit from sustainability are almost 200% more likely to develop sustainability business cases. The business case is often integral to the company's overall strategy. "Making the sustainability strat-

CLEAR BUSINESS CASE IS VITAL
About three times as many respondents who said that sustainability added profit had a business case for sustainability. That's been consistent over the past 3 years of our survey.





egy part of the global business planning process really turned things around for us,” says Peggy Ward, director of the enterprise sustainability strategy team at Kimberly-Clark. “We were able to demonstrate the competitive advantage that sustainability could provide.”

Retailer Marks & Spencer is a prime example of the business case in action. In 2007, the company announced its Plan A, which included 100 sustainability commitments over a five-year time frame. The company extended this in 2010 to 180 commitments to achieve by 2015 to become the world’s most sustainable major retailer. The plan has seven pillars that address customer involvement, climate change, waste, natural resources, becoming a fair partner, health and the company culture. The company’s achievements include becoming carbon neutral, giving customers the opportunity to give back by donating clothes, and integrating sustainability into its financial performance and reviews. The company reports that the plan has delivered \$296 million in economic benefits.⁴

Often, successful business cases mesh with a company’s business culture. Former Campbell Soup CEO Conant, for example, argues that many food companies have a “reap what you sow” mentality. He points out that the industry is heavily represented on surveys of the most socially responsible U.S. companies. For Dell, sustainability bolsters the company’s focus on efficiencies. “Dell abhors waste,” says Dell’s Pflueger. “Any inefficiency — whether it’s excessive days of inventory or energy waste — is something the company will want to address. Our approach to sustainability fits the company culture.”

The Hard-Nosed Numbers

Business cases for sustainability often focus on the numbers. Sprint, for example, invests in making its phones very easy to take apart. That investment allows them to recycle waste and refurbish phones for more price-sensitive markets. Sprint CEO Dan Hesse also underscores that Sprint’s hurdle rates for sustainability projects aren’t necessarily as stringent as they are for other opportunities. Solar panels, for example, might have a longer payback period than

other investments, but still make sense. “You always create a business case,” he says. “But you may need to use criteria with a longer time horizon. But as long as the return is positive, you can do it knowing it’s in shareholder interests.”

Intel also scrutinizes the numbers behind its sustainability activities, and its corporate finance unit has been charged with helping quantify the impact of sustainability efforts across the board. “Some of it is easy,” says Suzanne Fallender, director of CSR (corporate social responsibility) strategy and communications. “Since 2001, for example, we have invested more than \$45 million in 1,500 projects. We can quantify what we have saved in energy — about \$23 million in annual costs.”

Timberland leverages industry standards to tightly tie sustainability efforts to the bottom line. The company developed its own “nutrition label,” which it calls its Green Index. The index measures the climate impact, chemicals used and resources consumed by the manufacture of a footwear product. With the index, Timberland compares a product’s score to its profit margin. “I can find out if shoes with higher environmental impact are better or worse for margin,” says Betsy Blaisdell, senior manager of environmental stewardship. “They may be more expensive to produce, but generate better margins.”

Although Sustainability-Driven Innovators focus on the numbers, many try not to let them stand in the way of ideas that may be difficult to measure but, nonetheless, have an inherent strategic logic. Sprint’s Hesse points out that a number of sustainability activities build intangible value for the brand. The value of achieving high positions on global sustainability rankings, for example, is difficult to pin numbers to. However, he realizes that a teenager today will be a consumer tomorrow, possibly with high disposable income. Sustainability will be an important element of the brand to that generation. “It’s difficult to say how many subscribers those rankings will add,” he says. “You have to make some reasonable assumptions.”

Intel also makes general assumptions for some of its sustainability initiatives. Fallender points out that Intel is one of the largest purchasers of green power in the United States. The company knows it is

currently paying a premium for renewable energy. But it also believes that spurring demand will help bring down renewable energy costs in the future. “Just because you can’t always measure and monetize a sustainability activity doesn’t mean you can’t see the strategic value it creates,” she says.

Section IV

Customer and Stakeholder Effects

For Sustainability-Driven Innovators, customers are at the center. These companies are 80% more likely to increase collaboration with customers as a result of sustainability than are companies that did not change their business model. They are also much more likely to collaborate with competitors, suppliers and across their own business units.

AT&T, for example, has consumer advisory panels that include both end users and businesses. The panels’ goal is to understand customer decision-making processes and then determine the best way to communicate the company’s sustainability values. Like many other companies, AT&T realizes that customers are moving targets and their competitors are also aiming at them. As Michael Bremans at Ecover puts it: “All your activities need to be centered on customer expectations. Even without legislation and regulation, consumers are looking for sustainable lifestyles and the demand is going to grow faster and faster.”

Governments and political organizations do play a key role, but not as a source of pressure. Sustainability-Driven Innovators pull them into the fold to build expertise and help solve sustainability related issues.⁵ “NGOs are an important resource,” says Bremans. “They are an excellent source of information about how the market might react to a particular innovation.”

Kimberly-Clark formed an outside advisory board five years ago to bring fresh thinking to its sustainability efforts. “We were really inwardly focused,” said Falk, the CEO. “We had been eating our own cooking for a long time and thought we had all the answers.” Today, the company has ongoing dialogues with Greenpeace, the World Wildlife

Portrait of a Sustainability-Driven Innovator — Greif

The sustainability story at Greif, a leading manufacturer of industrial packaging, illustrates the importance of business-model innovation and several other hallmarks of Sustainability-Driven Innovators.

Scott Griffin is chief sustainability officer at Greif, a 135-year-old global industrial packaging company with net sales of \$4.2 billion in 2011. Griffin says there are four keys to Greif’s sustainability agenda. One is top management attention to sustainability. “One reason sustainability works here at Greif is high-level, strong executive commitment,” says Griffin. Unlike many chief sustainability officers, Griffin reports directly to the CEO and is a member of the company’s executive strategy team.

Another key to Greif’s sustainability approach is collaboration. Greif collaborates increasingly with customers and nongovernmental organizations on sustainability-related issues. These collaborations have helped the company not only establish sustainability-related goals, such as reductions in greenhouse gas emissions, but have also provided new opportunities for customer engagement and the development of new corporate capabilities.

Collaboration with customers ties into the third element of Greif’s sustainability program: business-model innovation. For instance, Greif worked with customers to analyze the life cycle of several of its products. The collaboration identified new business opportunities connected with reconditioning and extending the life of a major product line, steel and plastic drums. Greif now owns the largest industrial packaging reconditioner, EarthMinded Life Cycle Services.

New internal organizational structures are the fourth key to Greif’s sustainability agenda. Greif created a global energy team composed of business unit representatives in charge of achieving multiyear sustainability goals connected with energy reduction goals. In 2011, the global energy team helped cut Greif’s greenhouse gas emissions per unit of production by 10% from 2008 levels. Greif now has similar teams for sustainability goals connected with energy, waste and water.

Foundation and other NGOs. It is also working with suppliers to help them reduce waste and make progress with other sustainability goals.

Nestlé has brought together customers, advisors and competitors to develop what it calls “pre-competitive” practices. Ten years ago, for example, the company reached out to Danone and Unilever to help develop sustainable agriculture approaches. “We were like the oil and gas industry,” says Nestlé’s Johr. “A lot of what we did was having a negative impact. Instead of each of us working on our own, we decided to work together to figure out principles, practices and procedures.”

Timberland’s Green Index spurred the creation of the Higg Index, an industrywide coalition to measure the environmental and social impact of apparel products. According to Blaisdell, suppliers



were frequently saying they had “green” products, but there was no way to assess the claims or measure them against other products. The Green Index provides that baseline. To develop it, Timberland worked with academics and retail customers.⁶

Investors remain a challenging stakeholder group. There are investment firms that focus on sustainability, and a growing campus movement in the United States is urging their colleges to divest investments in companies that don’t meet environmental muster. Nonetheless, sustainability does not necessarily appeal to short-term investors. “They can have a big effect on share prices, because they trade regularly,” says Sprint CEO Dan Hesse. “Their time horizon is shorter than the payback period of most green investments.”

Section V

Hitting the Sustainability Bull’s-Eye

The trends are clear, and the stakes are high. Climate change, demographic shifts and population growth are increasing the sustainability demands placed on businesses. Our research has found that companies need not see these demands as a cost burden nor respond to them with tweaks to their businesses or “greenwashing.” Sustainability is both a business necessity and an opportunity, what PepsiCo’s Dan Bena calls the sustainability bull’s-eye. Even moderate changes to company business models can reap significant financial rewards.

Five Practices

Our study found that many companies are generating profits from sustainability. To do so, they are following these five practices:

1. Be prepared to change business models. Business-model innovation is a key indicator of whether a company will profit from its sustainability activities. Since business-model innovations can involve significant corporate change, organizations should address the need for and the speed of that change. Setting multiyear sustainability goals that matter needs consistent top management attention, especially if

achieving the goals requires adding new capabilities and changing elements of the business model.

2. Lead from the top, and integrate the effort. Although the momentum for sustainability efforts is often bottom-up, Sustainability-Driven Innovators lead it from the top. Executives make sure goals are set and tied to strategy. Steering committees and other coordinating groups ensure that knowledge is shared and that good ideas move systematically from pilot to rollout. Sustainability should never be a stand-alone effort. It needs to be integrated into the business and its operations with clear accountabilities.

3. Measure and track sustainability goals and performance. As the adage says: “If you can’t measure it, you can’t manage it.” Sustainability-Driven Innovators use scorecards, KPIs and other integrated reporting tools that track performance against goals. These measures give a clear signal that top management takes the effort seriously. In many cases, sustainability results are a key element of performance reviews and compensation.

4. Understand how customers think about sustainability and what they are willing to pay for in connection with sustainable products or services. Customers aren’t always willing to pay more for a “green” product or service.⁷ It is important to determine whether they are. In North America, LEED certified buildings have been definitively shown to command price premiums in the real estate market. In some parts of the world, especially Europe, consumers will pay a premium for environmentally sound products. But this approach only scratches the surface of sustainability opportunities. As is the case with Dell and Kimberly-Clark, sustainability can help target and address a broad range of market and customer needs.

5. Collaborate with individuals, customers, businesses and groups beyond the boundaries of the organization. Many companies are forming outside advisory groups to help frame their sustainability agenda. This process is an opportunity to get closer to customers, who can be a useful resource for identifying appropriate members. NGOs have become much more constructive in their corporate engagements and can help your company identify credible, meaningful and feasible sustainability objectives that lack the appearance of “greenwashing.”

Consider participating in or helping create an industry group to give your business an opportunity to shape what “doing good” means in your market.

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2. There are many business model frameworks to choose from. See, for example, H. Chesbrough, “Open Business Models: How to Thrive in the New Innovation Landscape” (Boston: Harvard Business Press, 2006); M.W. Johnson, C.M. Christensen and H. Kagermann, “Reinventing Your Business Model,” *Harvard Business Review* 86, no. 12 (December 2008): 50-59; A. Osterwalder and Y. Pigneur, “Business Model Generation: A Handbook for Visionaries, Game Changers and Challengers” (Hoboken, New Jersey: John Wiley and Sons, 2010); P. Lindgren, R. Jørgensen, Y. Taran and K.F. Saghaug, “Deliverable D 4.1 Baseline for Networked Innovation Models,” NEFFICS Consortium, 2011; R. Amit and C. Zott, “Creating Value Through Business Model Innovation,” *MIT Sloan Management Review* 53, no. 3 (spring 2012): 41-49; and Z. Lindgardt, M. Reeves, G. Stalk and M. Deimler, “Business Model Innovation: When the Game Gets Tough, Change the Game,” Boston Consulting Group, December 2009.
3. N. Kruschwitz, “Why Kraft Foods Cares About Fair Trade Chocolate,” *MIT Sloan Management Review*, September 12, 2012, <http://sloanreview.mit.edu/feature/why-kraft-foods-cares-about-fair-trade-chocolate/>.
4. L. Brokaw, “Marks and Spencer’s Emerging Business Case for Sustainability,” *MIT Sloan Management Review*, July 13, 2012, <http://sloanreview.mit.edu>.
5. Regulators, NGOs and the media are not driving the focus for Sustainability-Driven Innovators. However, our study found that companies less successful at sustainability business-model innovation are 25% more likely to be influenced by legislative and political pressures than Sustainability-Driven Innovators are, and 72% more likely to be driven by the need to maintain operating licenses.
6. N. Kruschwitz, “New Ways to Engage Employees, Suppliers and Competitors in CSR,” *MIT Sloan Management Review*, November 14, 2012, <http://sloanreview.mit.edu>.
7. Some recent research using highly rigorous randomized field experiments shows that people are willing to pay premiums. See J. Hainmueller and M. J. Hiscox, “Buying Green? Field Experimental Tests of Consumer Support for Environmentalism,” http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2062429.



About the Research

For the fourth year, *MIT Sloan Management Review*, in partnership with the Boston Consulting Group, conducted a global survey, to which more than 4,000 executives and managers responded. The analysis in this report is based on a smaller subsample of 2,600 respondents from commercial enterprises, with respondents from academic, governmental and nonprofit organizations excluded. The respondents' organizations are based around the world, and a wide variety of industries are represented. The sample was drawn from a number of sources, including MIT alumni, *MIT Sloan Management Review* subscribers, BCG clients and other interested parties.

In addition to these survey results, we interviewed practitioners and experts from a number of industries and disciplines to understand the practical issues facing organizations today. Their insights contributed to a richer understanding of the data and provided examples and case studies to illustrate our findings.

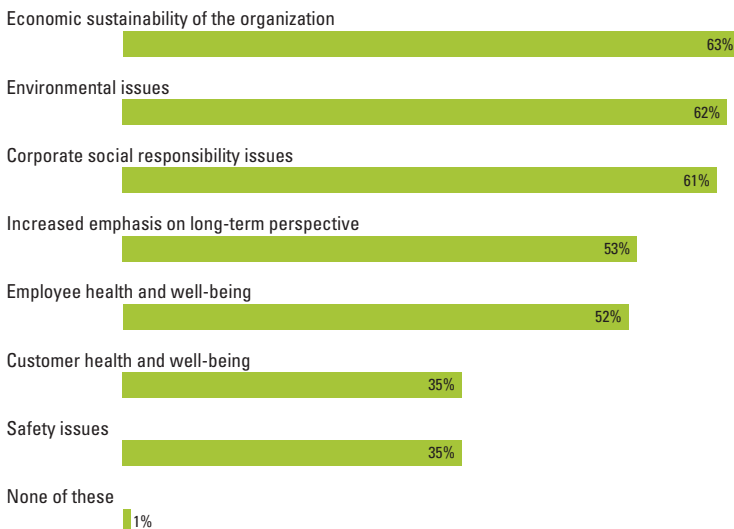
As a matter of terminology, we used "sustainability" to cover environmental, economic and societal topics. Respondents had a similar view. We asked respondents, "What factors does your organization consider as part of sustainability?" and asked them to choose all that applied from a list of options. A clear majority selected economic sustainability (63%). Environmental and corporate social responsibility issues, increased emphasis on long-term perspective and employee health and well-being were in the next tier.

The Survey: Questions and Responses

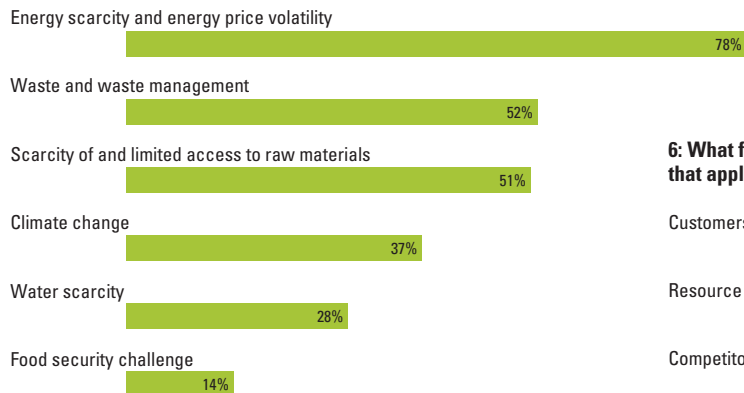
1: Of the following, which are the primary business challenges facing your organization over the next two years? (Please indicate top 3 in order of significance, with 1 indicating the most significant.)



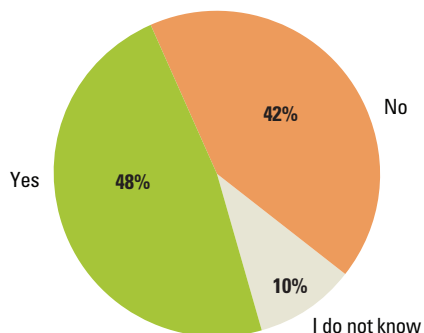
2: Which of the following does your organization associate with sustainability? (Please choose all that apply.)



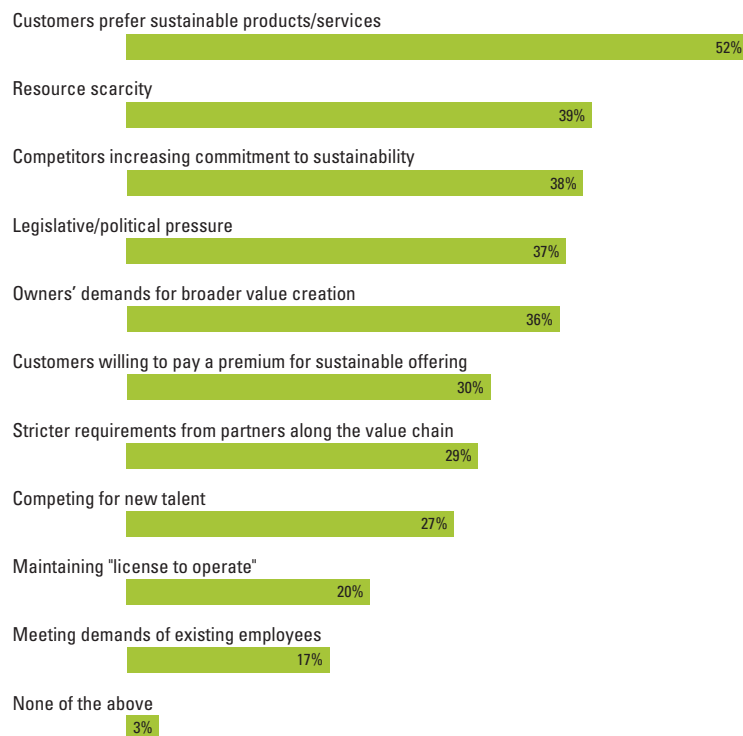
3: Which sustainability trend(s) do you see as most critical for your company over the next 3 years? (Please indicate the top 3 in order of significance, with 1 indicating the most significant.)



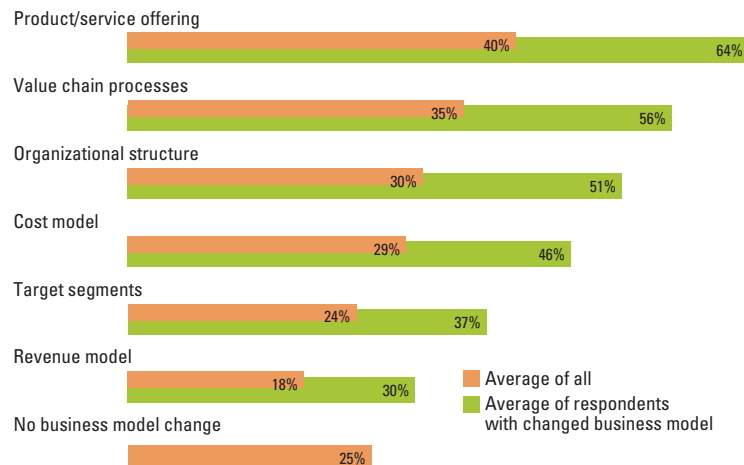
4: Has your organization's business model changed as a result of sustainability?



6: What factors have led to changes in your business model? (Please choose all that apply.) (Only those who answered "Yes" on Question 4 are considered)



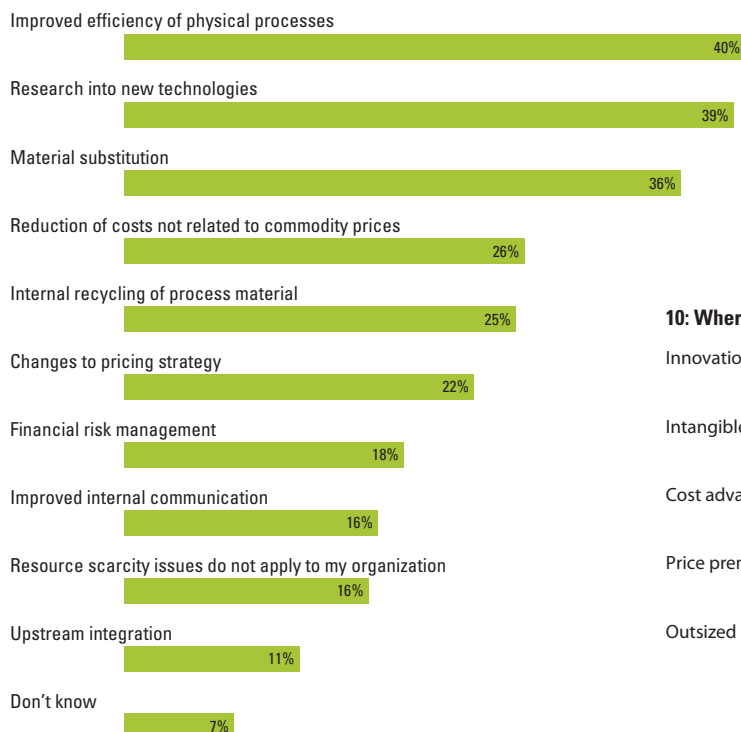
5: What elements of the business model has your company changed in connection with sustainability? (Please choose all that apply.)



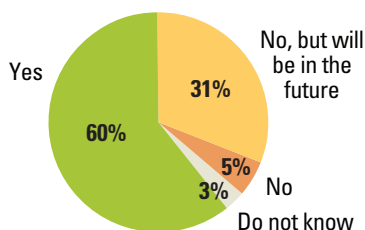


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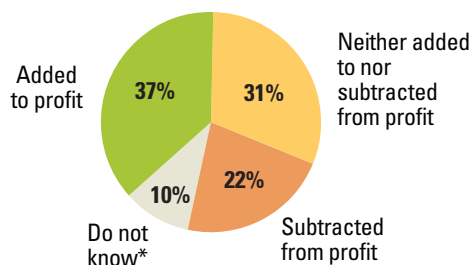
7: If you are facing resource scarcity issues, which of the following methods are you using to deal with them? (Please choose all that apply.)



8: Is pursuing sustainability-related strategies necessary to be competitive?



9: In general, how do you believe your organization's sustainability-related actions/decisions have affected its profitability?

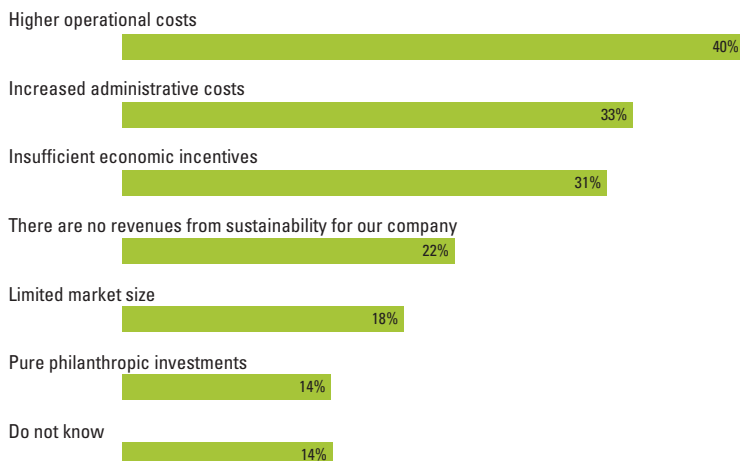


*Including "My organization does not engage in sustainability-related activities" (2010)

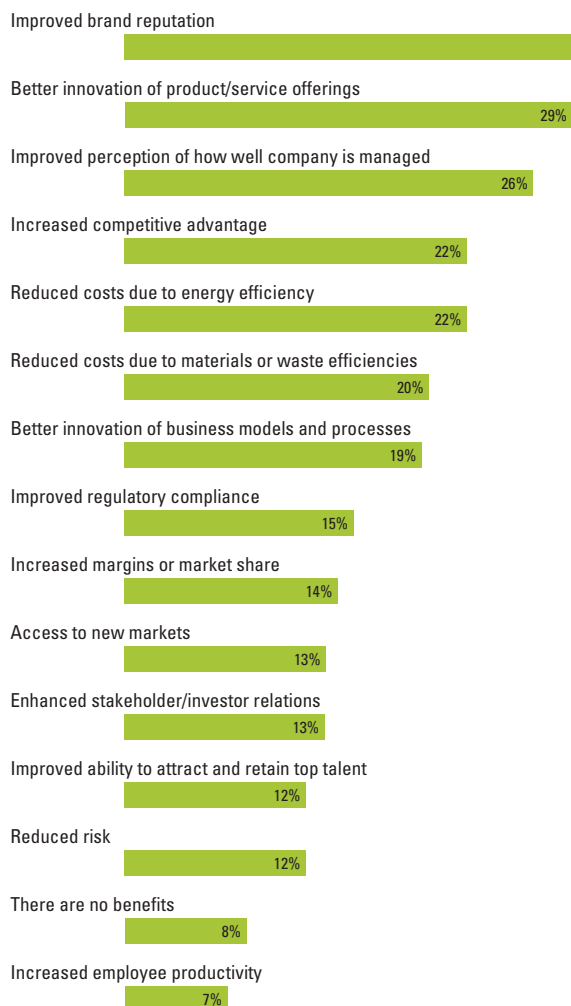
10: Where do you see profit from sustainability? (Please choose all that apply.)



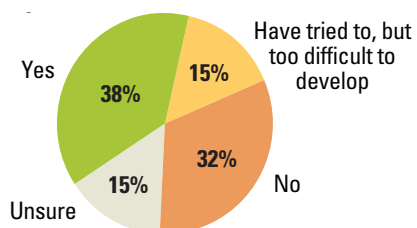
11: Why do you see sustainability as subtracting from profit? (Please choose all that apply.)



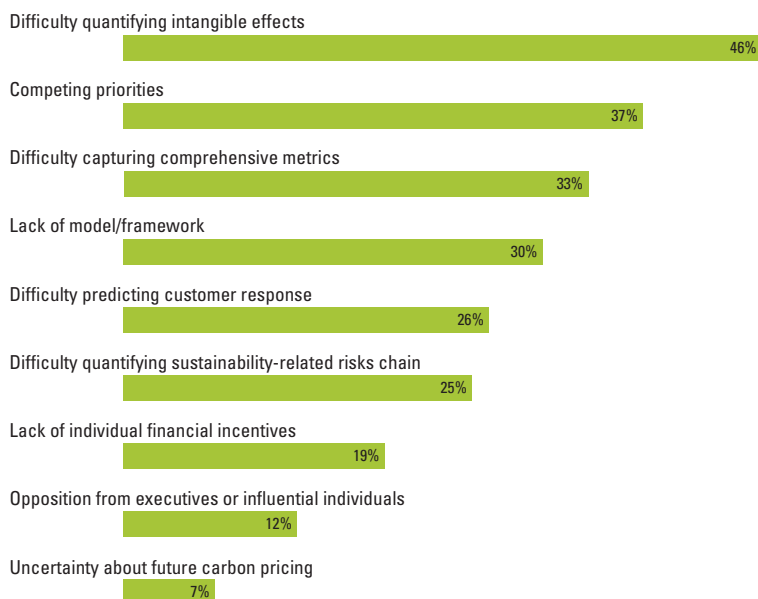
12 : What are the greatest benefits to your organization in addressing sustainability? (Please choose up to three reasons.)



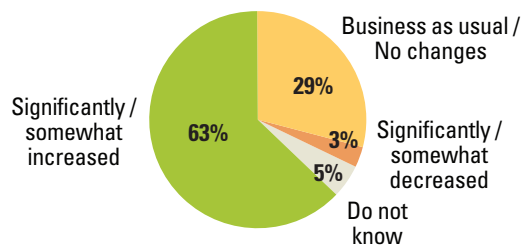
13: Overall, has your organization developed a clear business case or proven value proposition for addressing sustainability?



14: What are the most significant obstacles in your organization to evaluating the business case for sustainability-related strategies? (Please choose all that apply.)



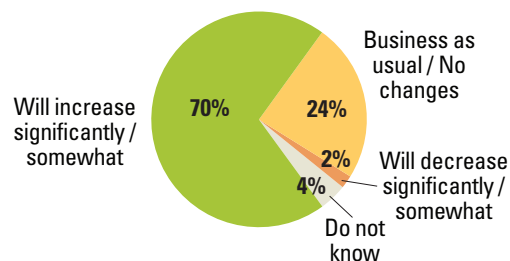
15: How has your organization's commitment to sustainability—in terms of management attention and investment—changed in the past year?



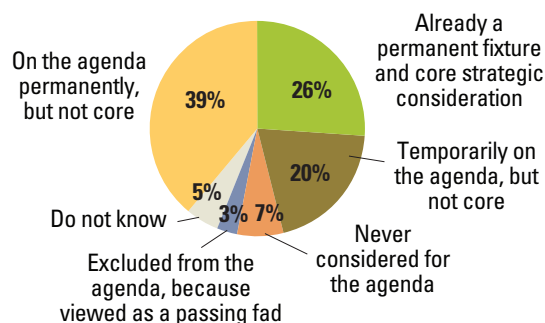


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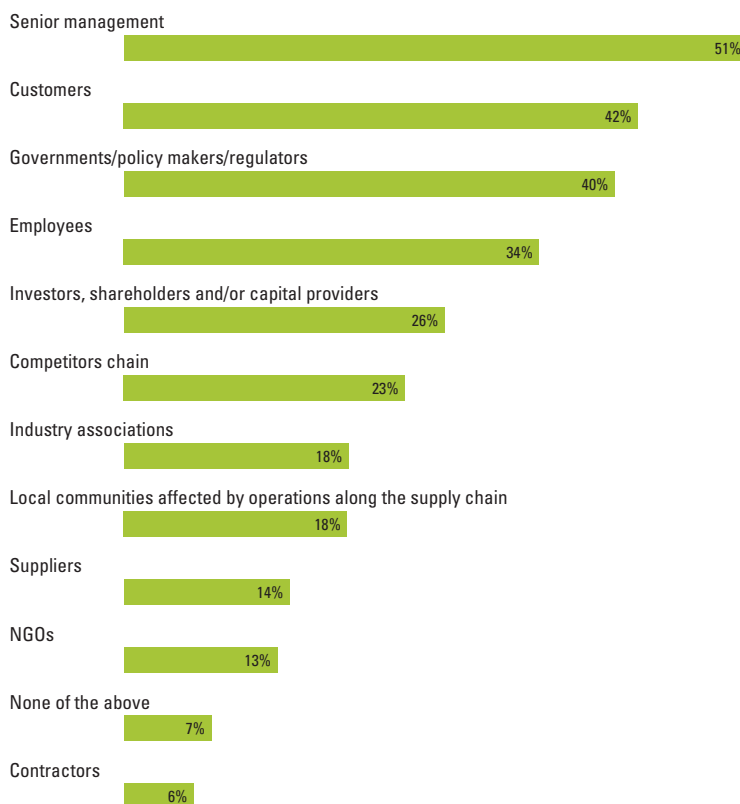
16: How do you expect your organization's commitment to sustainability—in terms of management attention and investment—to change in the year ahead?



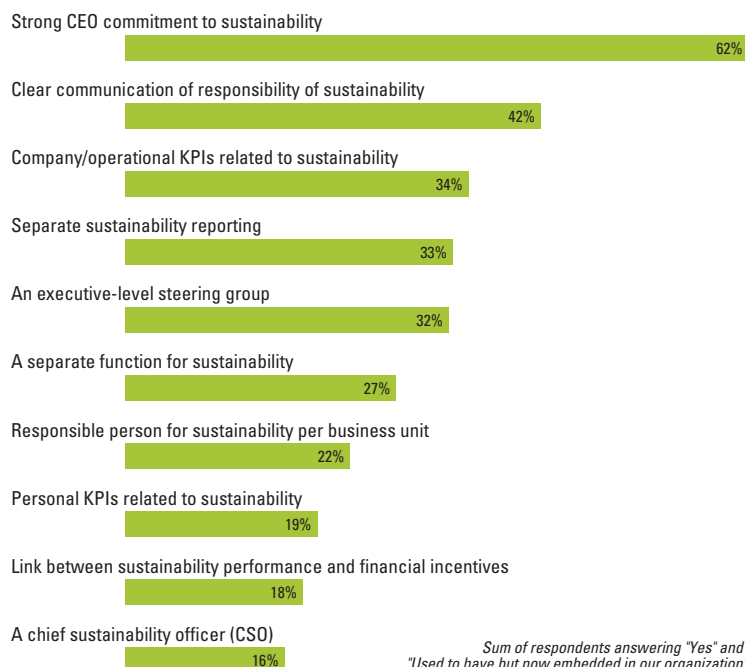
17: To the best of your knowledge, which of the following best describes the status of sustainability on the agenda of your organization's top management?



19: Which stakeholder groups are driving the sustainability agenda of your company today? (Please choose all that apply.)

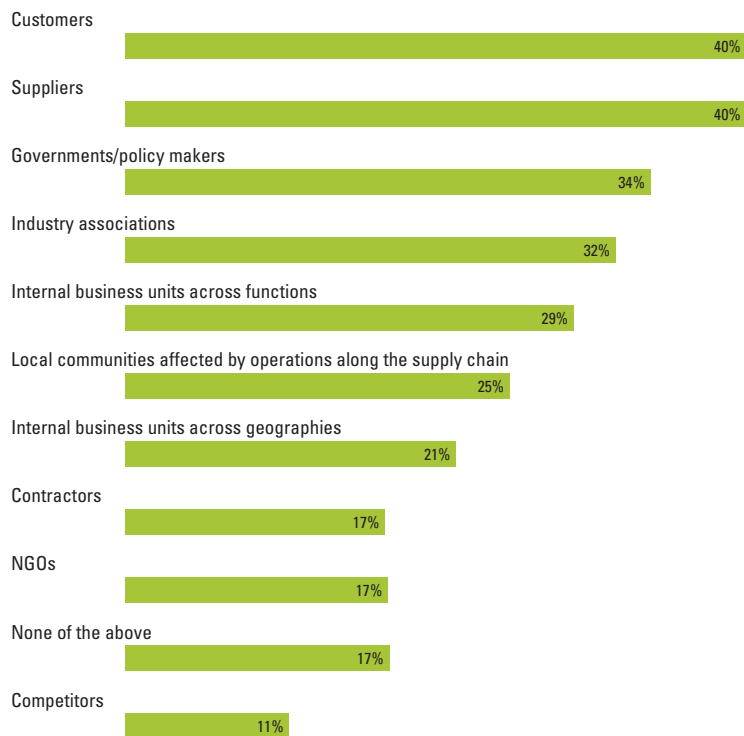


18: Regarding sustainability in your organization, does your organization have... (Please choose all that apply.)

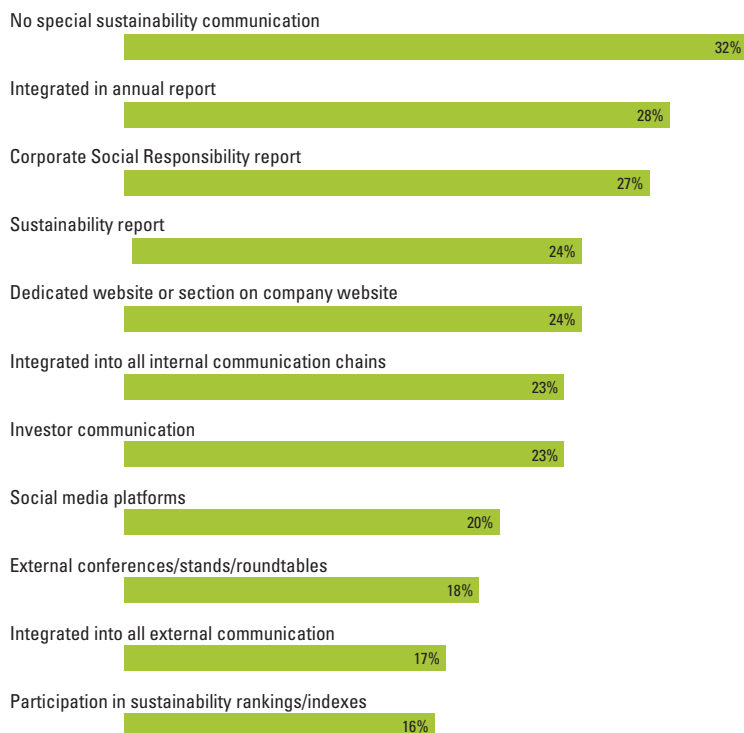


Sum of respondents answering "Yes" and "Used to have but now embedded in our organization"

20: Has sustainability caused your company to increase its collaboration with any of the following? (Please choose all that apply.)



21: How does your company communicate its sustainability efforts and commitments? (Please choose all that apply.)





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